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10/003,037	11/02/2001	William D. Morgan	IAEC:006US/MTG	1213

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FULBRIGHT & JAWORSKI L.L.P.  
A REGISTERED LIMITED LIABILITY PARTNERSHIP  
SUITE 2400  
600 CONGRESS AVENUE  
AUSTIN, TX 78701

EXAMINER

MENON, KRISHNAN S

ART UNIT PAPER NUMBER

1723

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/003,037

Applicant(s)

MORGAN ET AL.

Examiner

Krishnan S. Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9-15,28,29,32 and 33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,5,6,9-15,28,29,32 and 33 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 1,2,5,6,9-15, 28,29, 32 and 33 are pending.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 recites the limitation "system of claim 16". There is insufficient antecedent basis for this limitation in the claim because claim 16 was cancelled. For examination, examiner assumes claim 32 to depend from claim 1.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,2,5,6,9-15, 28,29, 32 and 33 are rejected under 35 USC 103(a) as being unpatentable over applicant's own admission of prior art, in view of Gerber (US 4,503,988)

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Instant claims are directed towards a device as shown in the references C4 and C2 as admitted by the applicant in the IDS of 2/17/04 as on sale or public use more than one year before the filing date of the application. Applicant also admits by affidavit that C4 is similar to the Gerber reference. Reference C4, as is the Gerber ref, teaches the float member, float compartment membrane, the first membrane and the float weights as claimed, but does not teach the plurality of gas relief vents. Ref C2 (public use or sale) teaches the relief vents in a device which has the floatation member and the float compartment membrane, but not the first membrane and the weights. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of C2 in the reference C4 (or the Gerber ref) for the gas relief vents to provide the gas or air relief to retain the membrane on the on the surface of water without lifting off due to accumulated gas underneath. One of ordinary skill in the art also would use the teaching of C4 (or the Gerber ref) in the teaching of C2 to have the first membrane between the floats to reduce the float and membrane material requirement and the weights to keep the covers under tension as taught by Gerber (col 1 line 54 – col 2 line 42).

The only element of the claims not clearly seen in these references C2 and C4 is the service opening of claims 14 and 15, which is shown by drawing 1-5, "Access Hatch" in reference C1, which is a proposal dated Nov 8, 1984, to build a membrane cover according to the specification provided by the solicitor (purchaser), and which belongs to a company by name ADI. It would be obvious to one of ordinary skill in the

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art at the time of invention to use the teaching of C1 in the teaching of C4 to provide access ports for sampling or service equipment.

Applicants' declaration regarding the disclosure to Lemna Corporation is moot because, according to MPEP, public use or sale could be a "secret sale or offer to sell".

MPEP 2133.03

35 U.S.C. 102(b) "contains several distinct bars to patentability, each of which relates to activity or disclosure more than one year prior to the date of the application. Two of these - the public use' and the on sale' objections - are sometimes considered together although it is quite clear that either may apply when the other does not." *Dart Indus. v. E.I. du Pont de Nemours & Co.*, 489 F.2d 1359, 1365, 179 USPQ 392, 396 (7th Cir. 1973). There may be a public use of an invention absent any sales activity. Likewise, there may be a nonpublic, e.g., "secret," sale or offer to sell an invention which nevertheless constitutes a statutory bar. *Hobbs v. United States*, 451 F.2d 849, 859- 60, 171 USPQ 713, 720 (5th Cir. 1971).

It should be noted that 35 U.S.C. 102(b) may create a bar to patentability either alone, if the device in public use or placed on sale anticipates a later claimed invention, or in conjunction with 35 U.S.C. 103, if the claimed invention would have been obvious from the device in conjunction with the prior art.

*LaBounty Mfg. v. United States Int'l Trade Comm'n*, 958 F.2d 1066, 1071, 22 USPQ2d 1025, 1028 (Fed. Cir. 1992)

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2. Claims 1,2,5,6,11-13,28,29 and 32 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Wilson et al (US 4,438,863) in view of Morgan et al (US 5,562,759).

Claim 1: Wilson teaches a pond covering system with a membrane (figures, col 3 lines 3-7) having floatation members covered by the membrane (col 3 lines 20-54; 22,28-fig 4; fig 1; col 3 lines (26-29) and plurality of gas relief vents (col 3 lines 30-43; at 34-fig 4). With ref to fig 4, consider the membranes 10 on the right side as the first membrane, the float 22 on the left side as the first float and the sleeve 28 covering the float 22 as the compartment membrane. In this scenario, the gas passage between the strips 34 and through hole 38 in pipe 36 the gas passage *within the first membrane and adjacent the first flotation member*. (The claim does not recite that there are plurality of holes in the membrane adjacent the first floatation member). Considering another way, the first membrane would comprise membrane 10 on either side of the float, the first float would comprise all the floats 22 and the pipe 36, the membrane (sleeve 28) covering the floats and the pipe would be the float compartment membrane, and the passage between the strips 34 through holes 38 into the pipe 36 would be plurality of gas passage-ways positioned *within the first float compartment membrane*.

The Wilson reference differs from claim 1 in that the newly added limitations in claim 1 by amendment of 3/28/05 makes the gas-relief passages as extending from the top and bottom surfaces of the membrane. Morgan teaches such an arrangement wherein the gas relief passage extend from the bottom surface to the top surface of the membrane in a pool cover with a gas collection system. It would be obvious to one of

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ordinary skill in the art at the time of invention to use the teaching of Morgan in the teaching of Wilson because the Morgan system is simpler and can be easily installed and removed without destroying the system (see Morgan col 1 lines 15-25 and 44-47)

Claims 2,5: The first float (22) is sealed in the first float compartment membrane (28). The float compartment membrane and the first membrane are coupled – see fig 4.

Claim 6: The gas relief passage is elevated above the membrane level (see fig 2 and 4).

Claims 11-13: The membrane is anchored by an anchor system as in instant claim 11 and 21 (col 3 lines 20-25), which comprises connectors coupled to the edge of the membranes as in instant claim 12 with sleeves as in instant claim 13 (20 fig 2).

Claims 28,29 and 32: Wilson (863) teaches a method for venting pool with providing a membrane pool cover having one or more membranes and float supports sealed in the membrane, and with a series of gas vent passages as in instant claims (see figures 1-10 and col 3 line 3-col 6 line 58, and the rejection of claims 1 and 16 for more details). Wilson also teaches venting directly to the atmosphere in col 5 lines 29-32, and vent 66 of fig 2. Thus Wilson anticipates direct venting through vent 66 in fig 2. If not, it would be obvious to one of ordinary skill in the art at the time of invention that the gas collected through the gas pipe 36 could be vented directly to the atmosphere, if separate collection of the gases is deemed unnecessary.

The Wilson reference differs from claims 28,29 and 32 in that the newly added limitations by amendment of 3/28/05 makes the gas-relief passages as extending from the top and bottom surfaces of the membrane. Morgan teaches such an arrangement

wherein the gas relief passage extend from the bottom surface to the top surface of the membrane in a pool cover with a gas collection system. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Morgan in the teaching of Wilson because the Morgan system is simpler and can be easily installed and removed without destroying the system (see Morgan col 1 lines 15-25 and 44-47)

3. Claims 9,10,14,15, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al (US 4,438,863) in view of Morgan et al (US 5,562,759 as applied to claim 1 above and further in view of Ref C1 of the IDS of 2/17/04.

Wilson in view of Morgan has more than one floatation member as in claim 9 – see fig 7.



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Wilson in view of Morgan do not teach the elongated weight positioned between the first and the second floatation members as in claims 9 and 10, and the service opening in the rest of the instant claims. Drawing 1-3 of ref C1 shows such elongated weights. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of C1 to provide the elongated weights to direct the biogas to the gas passageways in the floats as suggested by the C1 ref, page 3. Drawing 1-5 "Access Hatch" of the ref C1 teaches an access opening with edge support floatation members and membrane coupled to the service opening extending down through the opening and having ballast weight attached. It would be obvious to one of ordinary skill in the art at the time of invention to use the teachings of ref C1 in the teachings of Wilson in view of Morgan to provide stable service openings for providing mechanical equipment, etc. Moreover, the reference C1 shows that the inventors had prior knowledge of the need for the elongated weights and the service openings, and this was not part of their invention.

### ***Response to Amendment***

The declaration under 37 CFR 1.132 filed 3/28/05 seems insufficient to overcome the C13 reference, and accordingly the 102(b) rejection has been withdrawn.

With regard to the statements in paragraph 4: the negative pressure in the Gerber patent is produced by the weight of the cover (col 2), and the so called 'siphoning off gas' is only the migration of the gas to the perimeter or the central collection point; the central collection point being at the floats. Thus the Gerber patent,

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as is C4, teaches all the limitations of claim 1 except for the gas passageways. The examiner respectfully disagrees that the combination of C2 and C4 would render C4 less effective or ineffective.

### ***Response to Arguments***

Applicant's arguments filed 3/28/05 have been fully considered but they are not persuasive with respect to the 103(a) public use/sale rejection as stated above. Re the argument that there is no 'unobstructed flow', the holes for the fasteners do provide unobstructed flow around the fasteners. Moreover, the figure of C2 clearly shows unobstructed flow path between the membranes, and those flow paths are from one surface of the membrane to the other, and provides strong suggestion to one of ordinary skill in the art to provide gas vents.

Arguments re the C13 reference is moot, since the rejection based on at reference is withdrawn.

In response to the argument that there is no motivation to combine C2 and C4: the motivation to combine C4 and C2 is given the rejection. To the argument that C4 cannot be combined with C2 because C4 is a partial representation of a system similar to the Gerber'988 patent, and the Gerber patent or the C4 system has a negative pressure for siphoning off the gas collected under the cover, and would make C4 ineffective: Gerber patent teaches the negative pressure as caused by the weight of the cover in col 2:

40 collection point on the central panel, the gas will have less difficulty in migrating to the collection point due to the decrease in pressure caused by the weight of the cover as the gas approaches the manifold collection point.

and the Gerber system is same as what is claimed in the teaching in col 2, except for the vent holes (or gas passage ways):

20 Another system for enhancing the migration of gas to the perimeter or to the collection point in the central panels is to place a plurality of elongated floats under the tensioned panel cover portions creating a gas opening parallel to and on both sides of the float. The  
25 weights in the sumps maintain the cover in tension which holds the cover away from the sides of the sump and keeps the gas opening fully open.

One would be motivated to provide vent holes or gas passageways to the C4 system, therefore, to keep the cover in contact with the water surface, and prevent it from lifting off with gas build-up. Please note that C4 does not provide the peripheral gas vents as in the Gerber patent, but only the 'central collection point', which would motivate one of ordinary skill to provide gas vents. The test for combining is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

With re to the Wilson ref, arguments are moot because of the new grounds for rejection.

### **Conclusion**

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan S. Menon  
Patent Examiner  
5/4/05

  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700